

1 **CLAIMS**

2
3 1. A computer-readable medium having computer-executable
4 instructions for performing steps comprising:

5 receiving a stream of data from a server via a network;
6 rendering the stream of data at a first playback speed; and
7 switching to rendering the stream of data at a second playback speed
8 different than the first playback speed without a user-detectable break between the
9 rendering at the first playback speed and the rendering at the second playback
10 speed.

11
12 2. A computer-readable medium as recited in claim 1, wherein the
13 stream of data comprises a composite media stream including a video stream and
14 an audio stream.

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16 3. A computer-readable medium as recited in claim 1, wherein the
17 second playback speed is faster than the first playback speed.

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19 4. A computer-readable medium as recited in claim 1, wherein the
20 computer-executable instructions are further for performing a step comprising
21 receiving a user selection identifying the second playback speed, and wherein the
22 switching comprises switching to rendering the stream of data at the second
23 playback speed in response to the user selection.
24
25

1 5. A computer-readable medium as recited in claim 1, wherein the
2 receiving comprises receiving the stream of data at a rate faster than necessary in
3 order to aggressively refill a client data buffer.
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5 6. A computer-readable medium as recited in claim 1, wherein the
6 switching comprises immediately beginning rendering the stream of data at the
7 second playback speed as soon as a request to change to the second playback
8 speed is received.
9

10 7. A computer-readable medium as recited in claim 1, wherein the
11 computer-executable instructions are further for performing a step comprising
12 receiving the stream of data as a plurality of data packets, and wherein each of the
13 plurality of data packets includes a tag identifying whether it was transferred for
14 the first playback speed or for the second playback speed.
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16 8. A computer-readable medium as recited in claim 7, wherein the
17 computer-executable instructions are further for performing a step comprising
18 rendering the stream of data at either the first playback speed or the second
19 playback speed based on the tags of the plurality of data packets.
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21 9. A computer-readable medium as recited in claim 7, wherein the
22 computer-executable instructions are further for performing a step comprising
23 performing time-scale modification of the data stream in accordance with the
24 playback speed identified by the tags of the plurality of data packets.
25

1 providing the media content to the client at the first speed while locating a
2 correct position in a new data stream corresponding to the media content at the
3 second speed at which to begin transmitting the media content at the second speed;
4 and

5 transmitting, to the client, the media content corresponding to the second
6 speed after the correct position in the data stream is located.

7
8 **15.** A method as recited in claim 14, wherein the transmitting the media
9 content corresponding to the first speed and the transmitting the media content
10 corresponding to the second speed comprise transmitting the media content to the
11 client via a network.

12
13 **16.** A method as recited in claim 14, wherein the media content includes
14 audio data and video data.

15
16 **17.** A method as recited in claim 14, further comprising:
17 the client receiving the media content; and
18 the client rendering the media content at the first speed if the media content
19 corresponding to the first speed is received, otherwise the client rendering the
20 media content at the second speed.

21
22 **18.** At least one computer-readable memory containing a computer
23 program that is executable by a processor to perform the method recited in claim
24 14.
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19. A system comprising:

a client;

a server coupled to the client;

wherein the client is to,

play back a media stream at a current speed,

receive a request to change the playback speed to a new speed,

transmit an indication of the new speed to the server, and

begin playing back the media stream at the new speed; and

wherein the server is to,

receive the indication of the new speed from the client, and

alter the speed at which it transfers the media stream to the client,

overcompensating for the new speed.

20. A system as recited in claim 19, wherein the server is coupled to the via the Internet.

21. A system as recited in claim 19, wherein the media stream includes both an audio data stream and a video data stream.

22. A system as recited in claim 19, wherein the client is further to begin playing back the media stream at the new speed without a user-detectable break between the playing back of the media stream at the current speed and the playing back of the media stream at the new speed.

1 23. A system as recited in claim 19, wherein the client is further to
2 receive, as the request to change the playback speed, a user selection of the new
3 speed.

4
5 24. A system as recited in claim 19, wherein the client is further to
6 provide a graphical user interface via which a user can input the request to change
7 the playback speed.

8
9 25. A system as recited in claim 19, wherein the server is to
10 overcompensate for the new speed by sending the media stream at a rate faster
11 than necessary in order to quickly refill a data buffer at the client.

12
13 26. A system as recited in claim 19, wherein the client is further to
14 immediately beginning playing back the media stream at the new speed as soon as
15 a request to change to the new speed is received.

16
17 27. A system comprising:

18 a client;

19 a server coupled to the client;

20 wherein the client is to,

21 render a media stream at a speed at which the media stream is
22 tagged,

23 receive a request to change the rendering speed to a new speed, and

24 transmit an indication of the new speed to the server; and

25 wherein the server is to,

1 stream the media stream to the client,
2 receive the indication of the new speed from the client,
3 alter the speed at which it transfers the media stream to the client,
4 and
5 tag portions of the media stream streamed to the client prior to the
6 altering with an indication of a previous speed, and tag portions of the
7 media stream streamed to the client after the altering with an indication of
8 the new speed.

9
10 **28.** A system as recited in claim 27, wherein the server is coupled to the
11 client via the Internet.

12
13 **29.** A system as recited in claim 27, wherein the media stream includes
14 both an audio data stream an a video data stream.

15
16 **30.** A system as recited in claim 27, wherein the server is further to
17 stream the media stream to the client as a series of data packets, each data packet
18 including a tag identifying whether it corresponds to the previous speed or the new
19 speed.

20
21 **31.** A system as recited in claim 27, wherein the server is further to
22 perform time-scale modification of the media stream prior to streaming the media
23 stream to the client.

1 **32.** A system as recited in claim 27, wherein the client is further to
2 perform time-scale modification of the media stream prior to rendering the media
3 stream.

4
5 **33.** A system as recited in claim 32, wherein the client is to perform the
6 time-scale modification to alter the speed at which the media stream is rendered
7 based on the tags.